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SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHODS FOR IMPROVING GROWTH AND CROP PRODUCTIVITY OF PLANTS BY ADJUSTING PLANT
HORMONE LEVELS, RATIOS AND/OR CO-FACTORS

(57) Abstract: In agriculture when temperature and moisture deviate from the norm two things happen, plant growth suffers and
disease flourishes. The Stoller model for plant growth states that proper hormone balance is necessary for optimum growth and
performance. When growth conditions deviate from the norm, hormone balance is altered and plant growth suffers. This invention
presents evidence to support this model and explain the relationship between hormone levels and plant growth. A clear understanding
of this relationship will facilitate crop treatments aimed to eliminate these problems. Although we cannot control the climate, we
can control the damage caused by environmental stresses by manipulating the levels and/or ratio of plant hormones in the different
plant tissues. By adjusting the levels and/or ratios of hormones, particularly auxin and cytokinins in the root tissue, we can assist the
plant in overcoming or compensating for this environmental stress.



WO 2005/021715 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 37/10, 43/12, 43/38, 43/90

US CL : 504/241, 284, 297, 321, 323

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 504/241, 284, 297, 321, 323

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
none

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST: auxin-, cytokinin-, potato, solanum, vin-, sprout-, root-

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,361,999 B1 (LIN et al) 26 March 2002. see columns 1-9.	1-77
Y	MOHR et al. Physiology of Hormone Action, Chapter 23 in Plant Physiology. Springer 1995, pg. 383-408.	1-77
Y	COENEN et al. Auxin-cytokinin interactions in higher plants : old problems and new tools. Trends in Plant Science, 1997 Vol. 2 (9) p. 351-356.	1-77
Y	BERNIER et al. Physiological Signals That Induce Flowering. The Plant Cell, 1993, Vol. 5, pg. 1147-1155.	18-21

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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